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A New Species of *Aletia* (Lepidoptera, Noctuidae) Resembling *Aletia brunneicoccinea* CALORA

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Abstract A new species, closely related to *Aletia brunneicoccinea* CALORA, is described from the Philippines. Male and female genitalia of *Aletia brunneicoccinea* are redescribed in detail.

Key words Lepidoptera, Noctuidae, Philippines, *Aletia brunneicoccinea*, male genitalia, female genitalia.

Introduction

CALORA (1966) described *Aletia brunneicoccinea* in his revisional study of the *Leucania*-complex from the Philippines. The name *brunneicoccinea* is derived from two latain words, *i. e.*, "brunneus" which means brown and "coccineus" meaning red according to him. In the *Leucania*-complex from the Philippines, *Leucania leucospila* (HAMPSON) and *Pseudaletia albicosta* (MOORE) have also reddish brown forewings besides *A. brunneicoccinea*.

The author is now investigating the *Leucania*-complex from Asia and discovered a new species closely related to *A. brunneicoccinea*. These two species are known at present as endemic to the Philippines.

In this paper, this new species will be described below, with reference to *brunneicoccinea* and particularly their male and female genitalia.

Aletia brunneicoccinea CALORA
(Figs. 1, 3, 4)

Aletia brunneicoccinea CALORA, 1966, *Philipp. Agric.* **50**: 695－696, figs. 22, 53, 81, 82.

Length of forewing. 14.1－15.6 mm, av. 14.8 mm.

Male genitalia: Tegumen slightly narrow in lateral view; vinculum moderately broad in lateral view, with short dorsal arm; saccus moderately large. Uncus slightly short with hairs on distal half. Valva except cucullus roundly bulged ventrally; costa slightly curved; editum small with many hairs; ampulla moderately long and slightly beyond the posterior margin of valvula; sacculus narrow, and its dorsal margin

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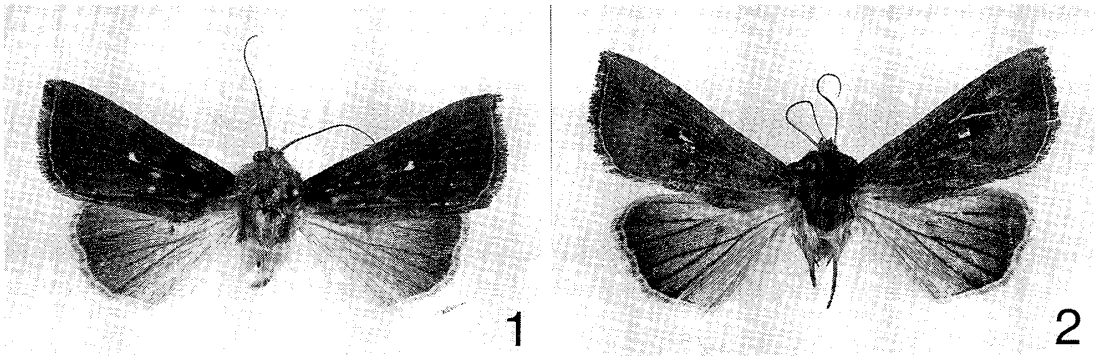

Figs. 1 – 2. *Aletia* spp. 1. *A. brunneicoccinea* CALORA; 2. *A. liebherri* sp. nov.

triangular on posterior half; harpe short, dorsal process of harpe short and very slender; valvula narrow with narrow membranous area; cucullus moderately broad with many diffused coronal spines, and its basal arm slightly long. Juxta W-shaped. Phallus unmodified; vesica moderately long, about 1.5 times as long as aedeagus when everted, with a tubular diverticulum at the middle, bearing dense spinules on entire surface beginning at the top of the diverticulum and extending to distal end, and short spines at distal end.

Female terminalia and genitalia: Seventh abdominal tergum and sternum unmodified. Eighth abdominal tergum unmodified, apophysis anterioris long. Ductus bursae sclerotized; ostium bursae unmodified. Ductus seminalis long and slightly bulged near vagina. Corpus bursae rounded; cervix bursae membranous except its basal portion. Papilla analis unmodified; apophysis posterioris long.

Specimens examined: 1 ♂ 2 ♀, Mt. Data 2250 m, Mountain Prov., North Luzon, 12 – 14. vii. 1985, M. OWADA; 4 ♂ 2 ♀, same locality, 24 – 26. vii. 1985, M. OWADA; 1 ♀, Sayangan 2300 m, Benguet Prov., North Luzon, 10. vii. 1985, M. OWADA; 1 ♂ 1 ♀, Barlig 1550 m, Mountain Prov., North Luzon, 17, 19. vii. 1985, M. OWADA; 7 ♂ 2 ♀, Sagada 1550 m, Mountain Prov., North Luzon, 21 – 23. vii. 1985, M. OWADA.

Distribution: Philippines (Luzon).

Remarks: This species is smaller than the following new species. CALORA (1966) noted that the wing expanse of this species was from 35 mm to 36 mm and the average was 33.8 mm, however, this is apparently inconsistent. The date on the genitalia slide label of the holotype (JGF No. 2804) is different from that stated in the description. Prof. Emeritus J. G. FRANCLEMONT kindly informed me that the date on the slide label is that when the slide was made, not when the specimen was collected. The figure of CALORA (fig. 22), depicting the male genitalia of a paratype, slide FBC No. 79, appears to well agree with those of the holotype.

Figs. 3 – 4. Male genitalia of *Aletia* spp. 3. *A. brunneicoccinea* CALORA; 4. *A. liebherri* sp. nov. A. Ring in lateral view; B. Right valva in inner view; C. Juxta; D. Phallus in dorsal view. Scales: A, B & D. 1 mm; C. 0.5 mm.

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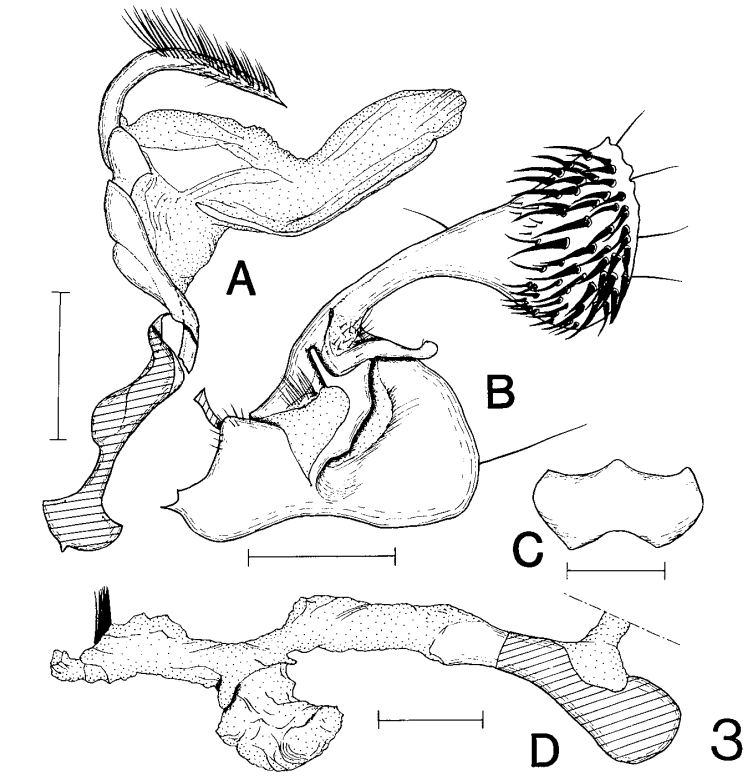

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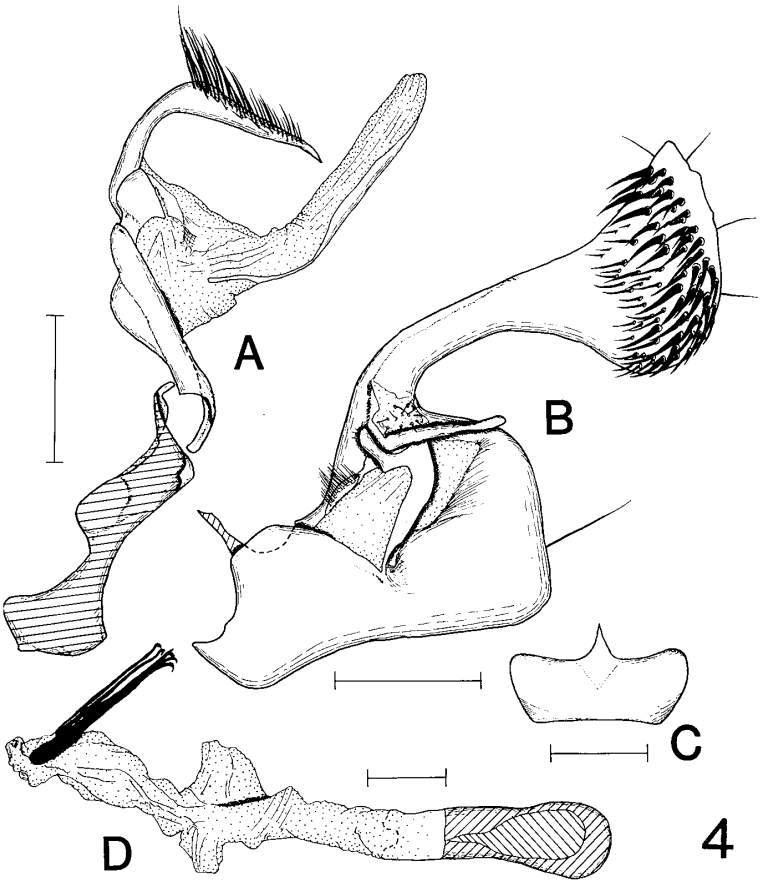

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Aletia liebherri sp. nov.
(Figs. 2, 5, 6)

Length of forewing. 16.2－17.7 mm, av. 16.7 mm.

Male. Frons and vertex brown. Thorax brown, slightly tinged with fuscous; tegula brown with spatulate fuscous-tipped scales in inner side. Abdomen brown, tinged with fuscous and with ventral black hair tufts basally. Forewing rufous brown, mixed with many fuscous scales; subbasal line indistinct; antemedial line represented by faint black spots on veins; a short white streak of distal portion on median nervure with a very small black point just upper it, beyond which is fuscous; orbicular and reniform indistinct; postmedial line represented by black spots on veins; terminal line represented by black spots on interspaces; cilia fuscous brown. Underside of forewing ochreous white, tinged with rufous brown, costal area irrorated with fuscous; postmedial line represented by a black spot on costa and short black streaks on veins; terminal line represented by black spots on interspaces; cilia rufous brown. Hindwing ochreous white, tinged with fuscous and the veins fuscous; a fuscous discoidal cell; cilia ochreous white with a fuscous transverse band in the middle. Underside of hindwing ochreous white, costal and postmedial area tinged with rufous brown; a fuscous discoidal cell; postmedial line represented by black spots on veins; terminal line represented by black spots on interspaces; cilia ochreous white with a slightly fuscous line through them.

Female. Without black hair tufts on the basal segment of the abdomen ventrally.

Male genitalia: Tegumen slightly narrow in lateral view; vinculum slightly broad in lateral view, with short dorsal arm; saccus moderately large. Uncus slightly short and raised dorsally on the top, with hairs on distal half. Valva except cucullus rather quadrate laterally; costa gradually curved; editum moderately large with many hairs; ampulla long and almost straight, and slightly beyond the posterior margin of valvula; sacculus narrow, and its dorsal portion trapezoid; harpe short, dorsal process of harpe short; valvula slightly narrow with narrow membranous area; cucullus moderately broad with many diffused coronal spines, and its basal arm slightly long. Juxta almost trapezoid with an acute central process. Phallus unmodified; vesica moderately long, about 1.7 times as long as aedeagus when everted, with a tubular diverticulum at the middle, bearing dense spinules on entire surface beginning at the top of the diverticulum and extending to distal end, and very long spines at distal end.

Female terminalia and genitalia: Similar to *brunneicoccinea*.

Holotype: ♂, Sayangan 2300 m, Benguet Prov., North Luzon, Philippines, 10. vii. 1985, M. OWADA.

Type depository: National Science Museum, Tokyo.

Paratypes: 1♂, Mt. Data, Mountain Prov., North Luzon, 30. v. 1977, Y. KUROSAWA; 4♂ 1♀, Mt, Data 2250 m, Mountain Prov., North Luzon, 12－14. vii. 1985, M. OWADA; 2♂ 1♀, same locality, 24－26. vii. 1985, M. OWADA.

Distribution: Philippines (Luzon).

Remarks: The forewings of this new species are generally paler than those of *brunneicoccinea*. The cornuti of *liebherri* are about 4 times as long as those of

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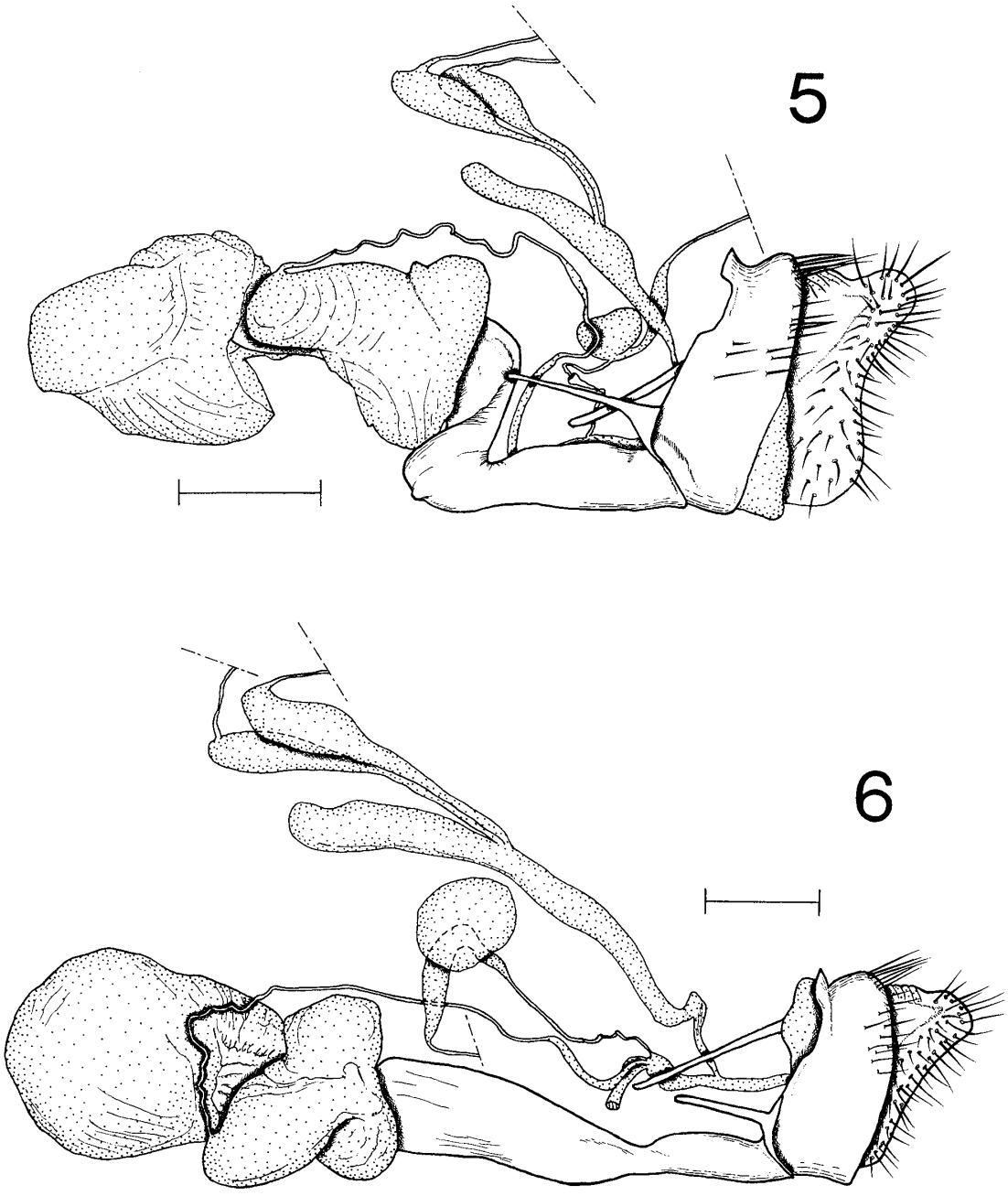

Figs. 5 – 6. Female genitalia of *Aletia* spp. 5. *A. brunneicoccinea* CALORA; 6. *A. liebherri* sp. nov. Scales : 1 mm.

brunneicoccinea. In the female genitalia these two species are difficult to be distinguished from each other. The name of this species is dedicated to Assoc. Prof. J. K. LIEBHERR of the Cornell University.

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of the genitalia slide of the holotype of *Aletia brunneicoccinea* and valuable information. I am grateful to Dr. M. OWADA of the National Science Museum, Tokyo, for the loan of the valuable material.

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摘　　要

Aletia 属（鱗翅目・ヤガ科）の１新種（吉松　慎一）

Aletia brunneicoccinea は CALORA（1966）によりフィリピンより記載された．本種の種名は二つのラテン語，brunneus（茶色），coccineus（赤）を結び付けたもので，成虫の前翅は文字通り赤褐色をしている．フィリピンからは赤褐色の前翅を持つキヨトウ類（*Leucania*-complex）としては，この他に *Leucania leucospila* (HAMPSON) と *Pseudaletia albicosta* (MOORE)（マエジロアカフキヨトウ；日本では屋久島と奄美大島より記録がある）が知られる．

ところが著者は最近，*brunneicoccinea* に近縁な赤褐色の前翅を持つ１新種（*A. liebherri* sp. nov.）をフィリピンより見出したので記載を行った．また *brunneicoccinea* の雌雄交尾器を図示し，再記載を行った．なお本論文で使用した標本は全て大和田守博士と黒澤良彦博士の採集品である．

両種の差異は以下の通りである．*A. liebherri* の前翅はより淡色で，開張は大きい．雄交尾器では *liebherri* の cornuti はより長い．両種の雌交尾器にはほとんど差がない．

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